



ICT Applications in Educational Fields

Verifying the results of academic ability development and non-cognitive skills development through digital arithmetic learning and teacher training

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EDU-Port Nippon initiative of Surara Net

Target Country : INDONESIA, SRI LANKA, EGYPT

1. Verifying the effectiveness of strengthening basic academic skills in math through “personalized learning” by digital education (Sri Lanka)

Ongoing



2. Verification of the improvement of non-cognitive skills essential for academic achievement through digital education

In an education support activity in collaboration with various Sri Lankan NGOs, develop “Surala Math-Digital Class” (target students: approximately 1,000 students) and measure changes in basic academic skills improvement. In addition, in collaboration with an international NGO, will investigate the improvement of non-cognitive skills of educators (instructors) and their students who are practicing digital class.

3. Organize joint Digital Math Contests in Japan and Sri Lanka to promote student learning and expand international cooperation.

Finished

Spreading “personalized learning” to the world through the ICT teaching material “Surala Math”

2,500+

Schools & Tutoring schools
In Japan & Overseas

430,000+

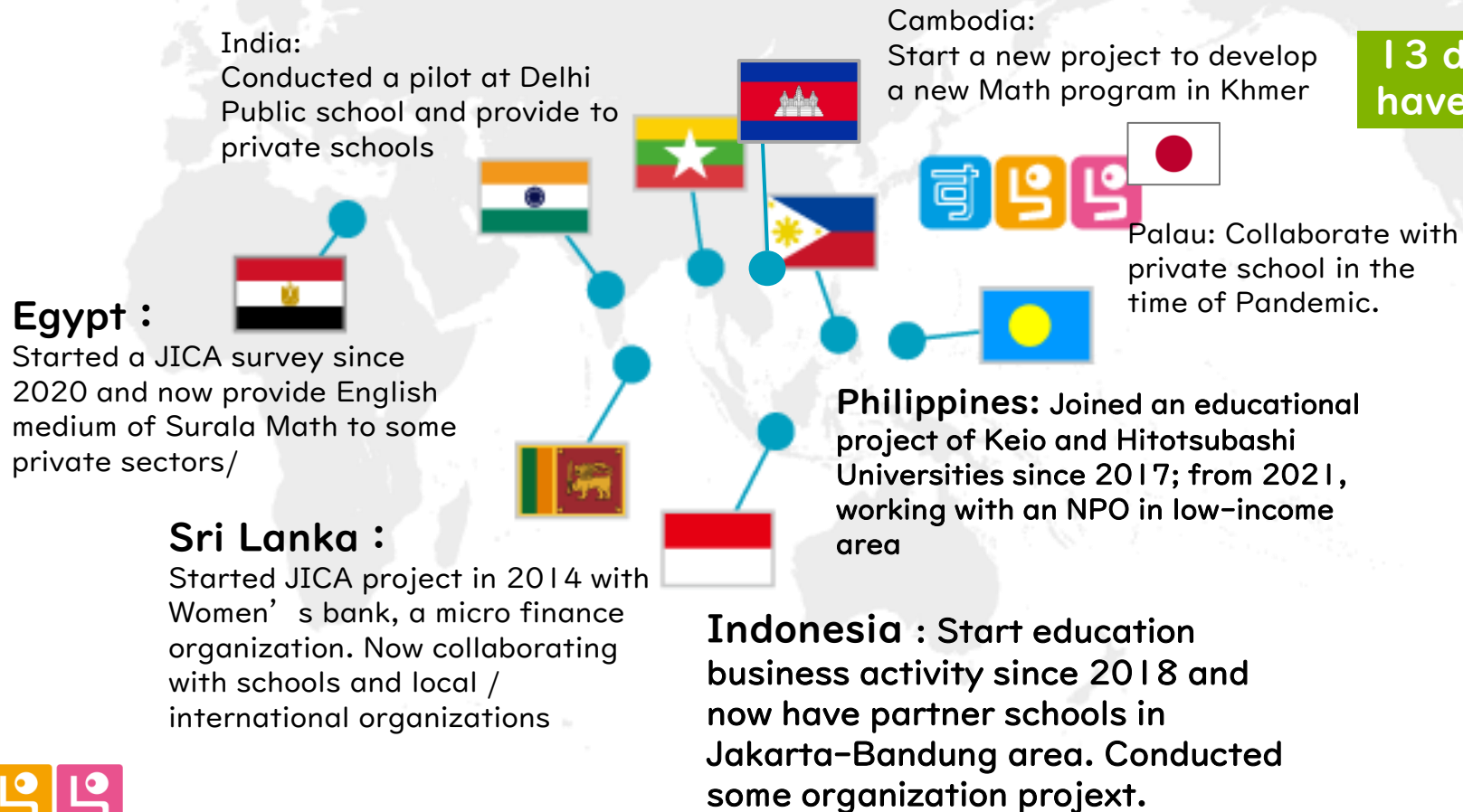
Active Users
Learning with Surala

13+

Awards and Projects
selected since 2008

Overseas Business Development of Surara Net

Education activities have been developed in 8 countries so far. Mainly for elementary to junior high school students aiming to strengthen their math skills. Currently, business operations are focusing on three countries: Indonesia, Sri Lanka, and Egypt.



13 demonstration and research projects have been undertaken and implemented



9 + 2 = 11

tens place	ones place
<div style="display: flex; justify-content: space-around;"> <div style="width: 20px; height: 20px; background-color: #ffccff; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #ffccff; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #ffccff; border: 1px solid black;"></div> </div>	9
	+
+	2
<div style="display: flex; justify-content: space-around; font-size: 1.5em;"> 1 1 </div>	

Carrying

Don't calculate with your fingers!

(1) Make 10.

9

(2) Find the left number.

1

+

1

10

+

1

=

11

(3) Add the 10 and the remaining number.




Surala Ninja! : English

↺

▶

🔊

12 × 3 = 36

දහයේ ඒවා

එකේ ඒවා

ස්ථානීය අගය නිවැරදිව ලියන්න!

1	2
↓ (2)	↑ (1)
3	6

1) එකේ ඒවා ගුණ කරන්න

$3 \times 2 = 6$ ✓

2) දහයේ ඒවා ගුණ කරන්න

$3 \times 1 = 3$ ✓

Surala Ninja! : Sinhala

Surala Math (From Primary Upper to Secondary; G8)

17 - 8 = 9


Tempat Puluhan	Tempat Satuan				
1	7		10	+	7
	8		8		
			2	+	7 = 9

Katakan cara 3 langkah

- (1) Pinjam 10
- (2) Kurangkan dari 10
- (3) Jumlahkan dengan bilangan yang tersisa

Surala Ninja! : Indonesian





Membandingingkan Pecahan dengan Penyebut yang Berbeda

10/10

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{5}$

● **Membandingingkan Pecahan**
(pecahan dengan penyebut yang berbeda)
Jika pembilangnya sama,
semakin besar penyebutnya, semakin kecil pecahannya.

Pecahan mana yang lebih besar?

$\frac{3}{8}$
 $\frac{3}{11}$

Jawab

+

1

2

3

4

5

6

7

8

9

10

+


-

×


÷

←

→



10/10



Mengenal Bilangan Desimal

3/8

Penulisan notasi pembagian :
sama dengan notasi pembagian .

27

← $\times 10$

Dua puluhan
dan tujuh satuan

2,7

→ $\div 10$

Dua satuan dan
tujuh persepuluhan

0,27


Dua persepuluhan
dan tujuh perseratusan


tempat puluhan	tempat satuan	tempat persepuluhan
2	7	


tempat puluhan	tempat satuan	tempat persepuluhan
2	7	

tempat puluhan	tempat satuan	tempat persepuluhan
0	2	7

● Cara memperkecil nilai tempat
Ketika kita membagi bilangan dengan 10,
bilangan bergeser satu nilai tempat ke
kanan.







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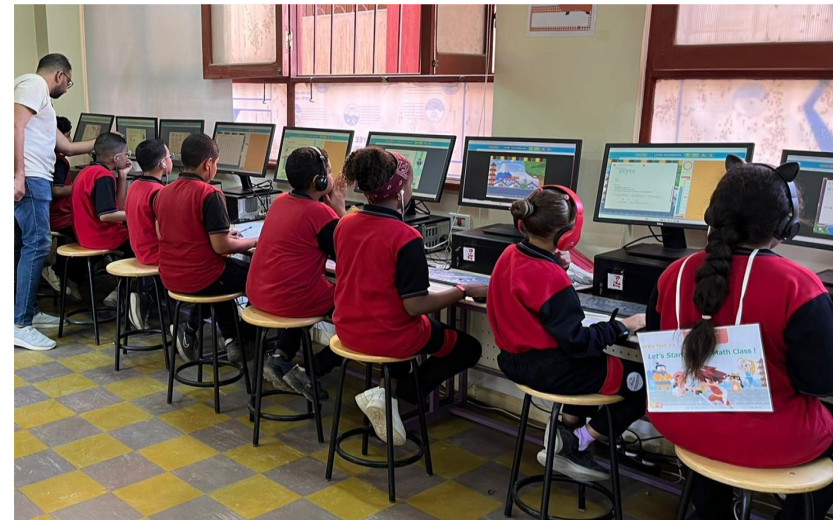


Trial Activities at Egyptian Japanese Schools (EJS) (From October 2024 – February 2025)



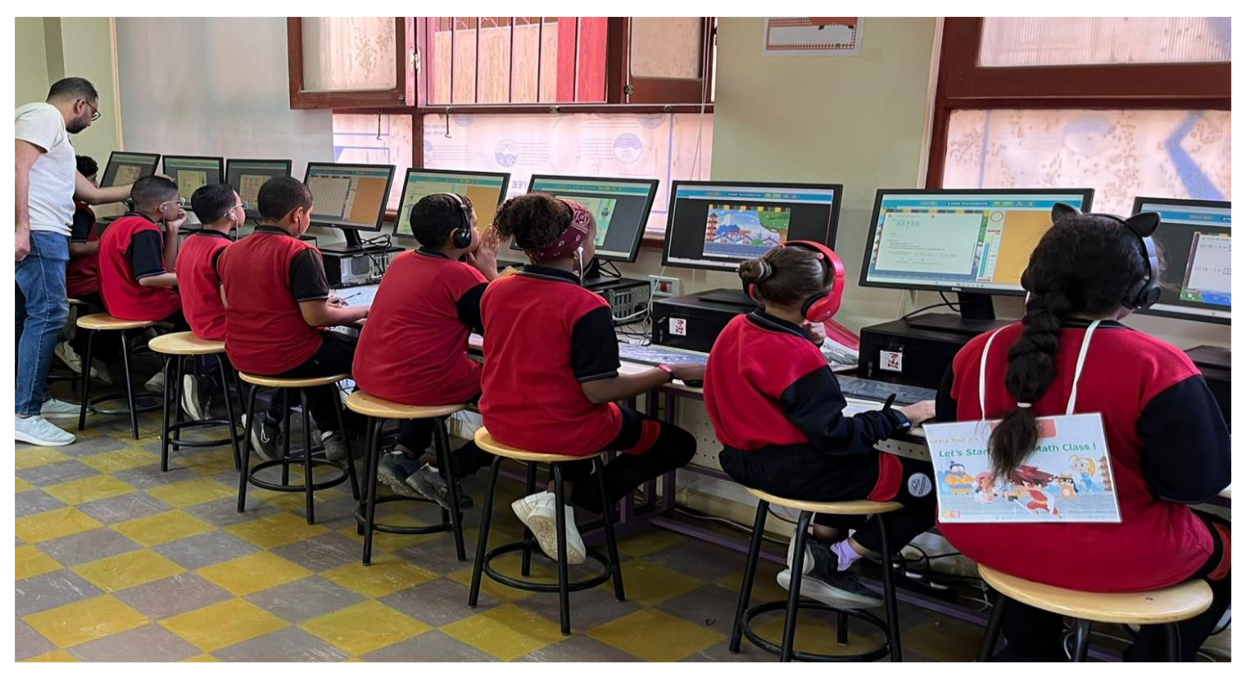
Surala Digital Math Class was held once a week on Saturdays. 71 students of G4 and G5 from 4 schools in the New Cairo and Aswan area participated. Five types of learning plans, discussed with teachers according to academic achievement levels by the Placement Test, were delivered to each student. The students acquired the personalized learning to improve academic performance such as mental calculation skills and fractions.

Trial School : (1) New Cairo School, (2) Met Gamal School,
(3) Hay El Asher School, and (4) El Radeshya School





**11 teachers participated in 3days Training
for the paradigm shift to digital education (September 2024)**



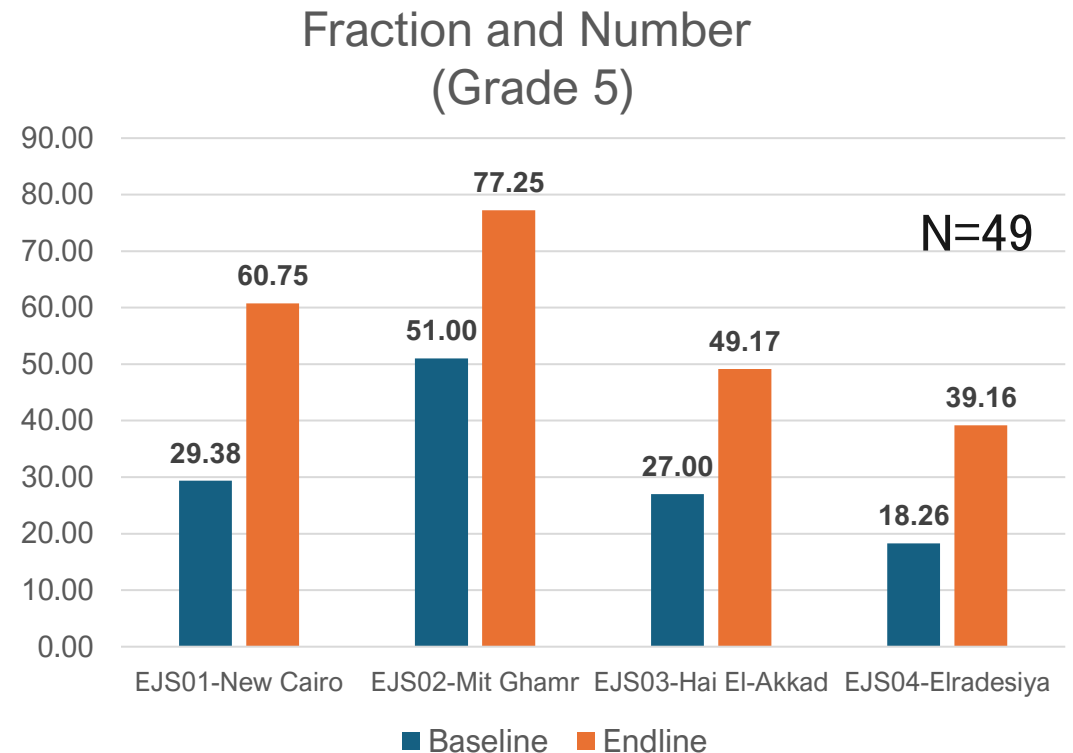
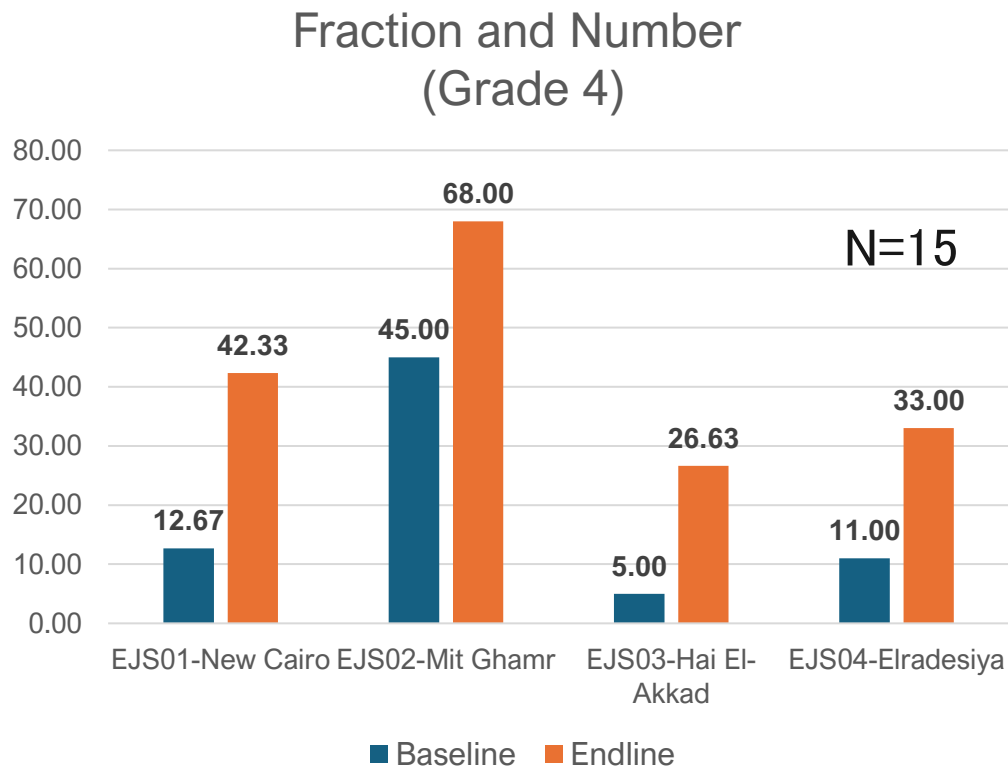
Digital Class Implementation at 4 schools of EJS (October 2024-)

Reference: Comparison of Baseline and Endline Test results (partial)



The discipline-based education practiced at EJS has been firmly established as the foundation of students' learning habits. As a result, Surala's digital learning effectively facilitate individualized learning.

- Grade 4 students showed an average score increase of 24.1 points and Year 5 students improved by 25.2 points.** (results of assessment test)



Promoting Digital Education in Egypt



- Focusing on the number of schools teaching in English that were identified through the JICA project investigation-Started approaching around 10 schools (from 2023)
- Implemented and produced results at 2 leading schools
 - ▶ Expand the number of grades each year
(currently G1-3: approx. 400 students utilizing the system)
 - ▶ Students acquire learning habits and increase the amount of learning year by year after the disruption of After Corona. The amount of learning has increased, and the evaluation of self-directed learning has also increased.
 - ▶ In 3rd year, “Surala Class” became the most popular at parent-teacher conferences.
- 11 schools from Egypt participated in the Surala Digital Math Contest.



Surala International Digital Math Contest 2024




Surala International Digital Math Contest - Online international Math Contest

- Countries : Indonesia, Sri Lanka, Egypt, Japan, Philippines, Cambodia
- Number of participating students: 3,800 students
- Category : Box Calculation / Math test




公益財団法人
日本数学検定協会
The Mathematics Certification Institute of Japan





Surala International Digital Math Contest

-2024-



Box Calculation Competition

Competing calculation accuracy and speed

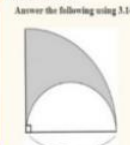
Box	Grade	Skills
40Box	Grade 1	Addition and Subtraction (without carrying)
50Box	Grade 2,3	Addition and Subtraction (with carrying and borrowing) ※Grade2 students challenge 40 box in preliminary round
100Box	Grade 4,5,6	Addition, Subtraction, Multiplication and Division
100Box Senior	Over Grade7	

Math Test

Competing comprehensive math skills

Test type	Recommended Grade
Category A	Grade4
Category B	Grade5
Category C	Grade6
Category D	Grade7

Problem number: 17
Answer the following using 3.14 for the π

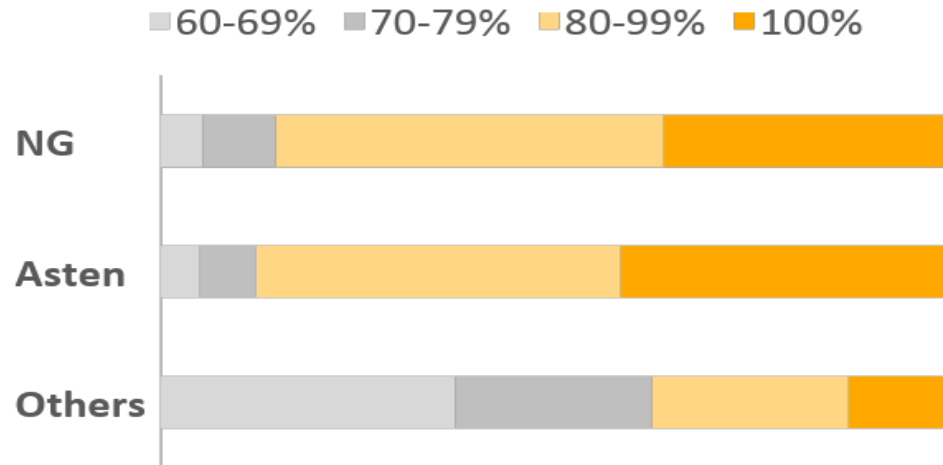




Reference: Academic Achievement Results in Surla Partner Schools in Egypt



【Results of the calculation category of the contest】
-Comparison of Grade 2 and 3 Scores



Since the implementation of the Surla platform, there has been a remarkable improvement in the students' math skills. The students' sense of responsibility and self-management skills have also improved throughout the class. The clear learning path of “Surala” has helped guide students along the way and established a more disciplined and focused approach to learning. In addition, monitoring features allow teachers to identify student challenges early and intervene at the right time. This proactive approach has further motivated students to learn.

● Personalized Learning

...Along with the spread of ICT education in the Corona Disaster, education around the world is accelerating **personalized optimization of learning** (provision of learning tailored to individual students) in order to address the academic achievement gap exposed by distance education, and the nature of education is undergoing fundamental change.

● Self-regulated Learning, SRL

... In today's society, students are required to be able to set their own learning goals, plan, implement, and review their learning. Therefore, education in the future must nurture the skills and attitudes needed to continue learning independently, rather than simply cramming knowledge into students.

Surala aims to enhance the power of self-regulated learning through digital learning experiences. → Closely related to non-cognitive abilities: developing **self-regulation, planning skills, and Grit.**

A group of students in red uniforms are seated at desks in a classroom. Many of them are holding and using mobile phones. Some are looking at the camera and giving thumbs up. The classroom has posters on the wall and windows with red frames.

Thank You

